

Brief Report

Empathy of Regular Junior High School Students on Children With Special Needs

Rheni Meiliani and Elisabet W. Hapsari

Faculty of Psychology Widya Mandala Catholic University Surabaya

Children with special needs (ABK) who are enrolled in regular (public) schools will elicit empathy or negative behavior, because regular students cannot comprehend and tolerate the behavior of the ABK. The aim of the present study is to investigate the relationship between empathy and attitude towards ABK on students of a regular junior high school in Surabaya. Subjects are 11-16 year old students ($N = 25$) who have interacted with an ABK, obtained through total population study. Data was collected with scales for attitude towards ABK and empathy, and was further analyzed with a non-parametric Kendall's Tau-b correlation. Results showed values for $r = .229$ and $p = .124$ ($p > .5$), indicating a lack of correlation between empathy and attitude towards ABK on regular students of the junior high school. This lack of correlation was argued to be because attitude includes a cognitive component that acts as a source of information, and empathy of an individual is objective and situational. It was further argued that external factors such as experience, culture, learning process, direct contact, and information can also contribute to the lack of relationship between the two variables. Descriptively, a majority of subjects have a moderately positive to very positive attitude (92%) and empathy towards ABK was categorized as very high (96%).

Keywords: attitude, empathy, special needs

Anak berkebutuhan khusus (ABK) yang memperoleh pendidikan di sekolah reguler (umum) akan memunculkan empati atau sikap negatif, karena siswa reguler tidak dapat memahami dan memaklumi perilaku yang dimunculkan oleh ABK. Tujuan studi ini adalah mengetahui hubungan antara empati dan sikap terhadap ABK pada siswa reguler sebuah SMP di Surabaya. Subjek berusia 11-16 tahun ($N = 25$) yang pernah berinteraksi dengan ABK, diperoleh melalui studi populasi total. Data dihimpun melalui skala sikap terhadap ABK dan skala empati, kemudian dianalisis dengan non-parametrik Kendall's Tau-b correlation. Hasil analisis menunjukkan nilai $r = .229$ dan $p = .124$ ($p > .5$) berarti tidak ada hubungan antara empati dan sikap terhadap ABK pada siswa reguler SMP tersebut. Tidak ada hubungan empati dengan sikap terhadap ABK karena di dalam sikap terdapat komponen kognitif yang memiliki peran sebagai informasi dan empati yang dimiliki individu yang bersifat objektif dan situasional. Selain itu, tidak adanya hubungan antara kedua variabel dapat disebabkan oleh faktor eksternal seperti pengalaman, kebudayaan, proses belajar, kontak langsung, dan informasi. Secara deskriptif mayoritas subjek memiliki sikap cukup positif hingga sangat positif (92%) dan empati terhadap ABK pada kategori sedang sampai sangat tinggi (96%).

Kata kunci: sikap, empati, kebutuhan khusus

In the compulsory study program, every citizen has equal opportunity to obtain appropriate edu-

cation, including children with special needs. This is regulated in UU No. 23, Year 2003 about the National Education, in articles 51 and 52 subsection 2 explaining that children with physical and/or mental disability are given accessibility in regular education or are provided the opportunity to access

Correspondence concerning this article should be addressed to Elisabet W. Hapsari, Faculty of Psychology, Widya Mandala Catholic University Surabaya Jalan Kalisari Selatan No. 7, Tower B, Pakuwon - Laguna Surabaya. E-mail: elisabetwidyaninghapsari@gmail.com

education just like regular students (Darmadji, 2009).

Suran and Rizzo (as cited in Mangunson, 2009) stated that children with special needs are:

“Children who are significantly different in a number of dimensions that are important for human functionality. They are those who are physically, psychologically, cognitively, and socially hampered to achieve their goals/needs and their maximum potential, these include the deaf, blind, speech impaired, physically disabled, mentally retarded, and emotionally disturbed. Also children with very high intelligence can be categorized as special/outstanding, due to the need to have a professionally trained educator.”

Initially, the education system in Indonesia encourages children with special needs to attend special schools (SLB). SLBs are schools that use the segregation model to separate children with special needs from their peers. SLBs also have different curriculum, teaching methods, learning facilities, evaluation systems, and teachers (Ermawati, 2008). From the year 2000, the Indonesian government decided to create inclusive education in every city and district for elementary, junior high, high school, and vocational school (Mangunson, 2009). Inclusive education means that the education system provides opportunities for all students who have a disability and/or other talents to attend learning and education in the same educational environment with their peers (Gunawan, 2011). In recent times, many regular or public schools accept children with special needs to attend their school. Indirectly, this means that those schools apply inclusive education, because some children with special needs will be integrated with the regular class so they can receive equal study rights with their peers (Nofrianto, 2008).

One particular school that accepts ABK is SMP Manguni Surabaya. Regular and special needs students receive education in the same environment. SMP Manguni is a regular school that accepts special needs students such as those with autism, ADHD, and slow learners (the three special needs are categorized as mild) and thus indirectly they apply inclusive education. This inclusive education in SMP Manguni is not absolute, in that special needs students who are currently enrolled in the education process with their non-disabled peers will not be pulled out of the class and be separated, and thus special needs and non-disabled students will always be in the same class every day. This means that ABK students in SMP Manguni attend classes

just like regular students.

In inclusive education, ABK students are usually placed in a special class with special materials to prepare them for integration with other regular students. In class, special needs students are seated with regular students. This is done so that the regular students can help and inform the special needs students. This particular school has yet to have a specialized, continuous program for regular students to help them adapt with their special needs friends at school. SMP Manguni only gives socialization opportunity for the regular students, as stated by the head of school when students first attend school, regular students were given understanding and socialization to always help and understand their friends who have special needs.

In addition, the SMP Manguni's head of school always inform regular students of the arrival of new special needs students in their school. The aim of this socialization is to help regular students have a more positive attitude, and acceptance on the fact that they will have special needs students as part of their school life. This is seen by the fact that regular students sometimes help to explain the materials presented by the teacher for special needs students. However, at times, when a special needs student starts to feel “uncomfortable” with the busy classroom, some regular students chose to laugh or keep silent.

In its application, not all regular students can fully participate to achieve the goal of SMP Manguni. This is due to an internal factor such as attitude (Vignes et al., 2008). Feldman (1998) defined attitude as a learned tendency to respond favorably (supporting) or unfavorably (not supporting) towards individuals, ideas, or objects (Azwar, 2009). Attitude consists of cognitive, affective, and conative component. The cognitive component is a representation of the belief of an individual, the affective component are feelings related to the aspect of emotion, and conative component is an aspect regarding the tendency to behave in a certain way according to the attitude of the individual (Azwar, 2009). Individual attitude will differ according the evaluation given. A majority of people hold a negative attitude towards individuals with special needs and consider them as a minority. This is reflected by results of observation and interviews done by the researcher, where students who have a negative attitude will try to avoid children with special needs.

Not all regular students have a positive attitude in

accepting the presence and existence of special needs students. This is because the attitude of an individual is a result of learning, and the continuous formation of attitude will occur in the human interaction related to a particular object (Dayakisni & Hudaniah, 2006). Attitude formation is influenced by two factors which are internal factors from within the individual and external factors coming from outside the individual (Walgito, as cited in Dayakisni & Hudaniah, 2006).

According to Azwar (2009), the emotional factor is one of the strongest and most persistent in influencing attitude. Emotion is an internal factor. It can be the trigger of an individual behavior, and indeed the behavior of a person can be seen more clearly when accompanied with an existing emotion such as: tone of voice, facial expression, and gestures (Mauss & Robinson, 2009). An internal factor is a factor arising from within an individual and is influenced by a person's emotional brain, which in turn is affected by the condition of the amygdala, neocortex, limbic system, prefrontal lobe, and other things in the emotional brain. An external factor is a factor coming from outside an individual and influences a person to change an attitude. External individual factor may be of an individual nature, a group, among individuals affecting groups or the other way around (Walgito, as cited in Dayakisni & Hudaniah, 2006).

A study done by Vignes et al. (2008) regarding factors influencing student attitude towards their special needs friend found that the affective component is the most influential. The thought and behavior of regular students towards special needs students is determined by the regular student's affective component. Specifically, positive thoughts and behavior of regular students on special needs students are determined by the regular students' positive feelings. Thus, whether or not a behavior or attitude is positive is determined by positive or negative affect towards special needs student. This finding is supported by the study from Batson et al. (1997) who also stated that empathy, an emotional response that is a part of the feeling and evaluation component, can influence a person's attitude. However, not all adolescents can respond with empathy. This is because in recent times, adolescents are growing increasingly ignorant towards other people, helping only when asked or when offered an incentive. Empathy is an affective and cognitive response towards the emotional pressures

from other individuals, including the ability to feel other people's suffering, empathizing, and trying to solve another person's problem through the perspective of that other person (Baron & Byrne, 2000). Empathy has a cognitive and affective component. The cognitive component is the ability to identify and label the feeling of others and the ability to assume their perspective, whereas the affective component is the capacity to emotional responsiveness (Feshbach, as cited in Mussen & Henry, 1994). These two components will help regular students to give an emotional responsive and consider other people's perspectives, influencing their own behavior on students with special needs in their school.

Many types of development including physical, cognitive, and psychosocial development that occur during adolescence (Papalia et al., 2009) can influence attitude and empathy of students, because of changes in their cognitive, moral, and social changes. In their cognitive development, regular students are now capable to have abstract thinking and are capable of understanding their surroundings, creating an emotional consequence (Papalia et al., 2009). On a moral development, students understand moral values that will then determine their attitude (Ali & Asrori, 2008). This is in line with Kohlberg's third stage of moral development, where individuals possess values of trust, attention, and loyalty to others which in the present study occurs between regular students and special needs students as a baseline for their attitude (Santrock, 2007). In this period, students also possess social cognition, which is the ability to understand others (Yusuf, 2000). This is related to the development of empathy during adolescence, which is the ability to understand and respond to the emotions felt by others.

Based on the earlier explanations, it can be concluded that attitude towards special needs students can be positive or negative according to the empathy possessed by regular students. Attitude and empathy are supported by development occurring during early adolescence, mainly cognitive, moral, and social development. Therefore, a high level of empathy will lead to more positive attitude towards students with special needs, and on the other hand a low level of empathy will lead to more negative attitude towards students with special needs. It was hypothesized that there is a relationship between empathy of regular students and their attitude towards special needs students.

Table 1
Frequency Distribution of Attitude Towards Students with Special Needs

No.	Category	Score Limit	Frequency	Percentage
1	Very Negative	$X \leq 24$	1	4%
2	Negative	$24 < X \leq 33$	1	4%
3	Moderate	$33 < X \leq 42$	10	40%
4	Positive	$42 < X \leq 51$	12	48%
5	Very Positive	$X > 51$	1	4%
	Total	-	25	100%

Tabel 2
Frequency Distribution of Empathy of Regular Students

No.	Category	Score Limit	Frequency	Percentage
1	Very Low	$X \leq 16$	0	0%
2	Low	$16 < X \leq 22$	1	4%
3	Moderate	$22 < X \leq 28$	4	16%
4	High	$28 < X \leq 34$	12	48%
5	Very High	$X > 34$	8	32%
	Total	-	25	100%

Method

Data was collected with Likert scales, which are Attitude Towards Special Needs Children scale and the empathy scale. Item validity analysis was done by correlating the scores of each item with the total score, using correlation coefficient formula of .3 (Azwar, 2007). Test of reliability on attitude towards special needs children scale yielded a score of $\alpha = .904$, while the empathy scale yielded a score of $\alpha = .816$. The validity coefficient of on attitude towards special needs children scale obtained ranges from .405 to .836. The validity coefficient of on empathy scale obtained ranges from .379 to .596. The method of data analysis used was a non-parametric Kendall's Tau-b statistics.

Results

Attitude Toward Students With Special Needs

Table 1 presents the frequency of attitude on students with special needs, and it can be seen that the most amount of students was categorized as positive, which include 12 students (48%), 10 students were moderate (40%), one student has a very negative attitude (4%) and another one has a negative attitude (4%). One student was categorized

as having a very positive attitude (4%).

Table 2 showed that a majority of subject (12 students) have high empathy (48%). Eight students were categorized as having very high empathy (32%), four were categorized as moderate (16%) and one was categorized as low (4%).

Table 3 (cross tabulation) showed the following results: (a) None of the subjects have very low empathy; (b) One subject (4%) has a very negative attitude towards special needs students, and also a very high empathy; (c) In the category of attitude towards special needs students, 10 were moderate (40%), this include three (12%) with moderate empathy, six (24%) with high empathy, and one (4%) with very high empathy; (d) A majority of subjects have a positive attitude on special needs students with a total of 12 subjects (48%), consisting of one (4%) with a low empathy, one (4%) with moderate empathy, five (20%) with high empathy and five (20%) with very high empathy; (e) One subject (4%) indicates a very positive attitude towards special needs student and also has a very high level of empathy.

Assumption tests on both variables indicate that the data was normally distributed ($p = .200$) and the data was non-linear ($p = .334$) with an F value of 1.030, therefore a non-parametric Kendall's Tau-b statistics was used for hypothesis testing. Results of the hypothesis test yielded a significance value of

Table 3

Cross Tabulation Between Attitude Towards Special Needs Students and Empathy

Attitude	Very Negative		Negative		Moderate		Positive		Very Positive		Total	
	F	%	F	%	F	%	F	%	F	%	F	%
Empathy												
Very low	0	0	0	0	0	0	0	0	0	0	0	0
Low	0	0	0	0	0	0	1	4	0	0	1	4
Moderate	0	0	0	0	3	12	1	4	0	0	4	16
High	1	4	0	0	6	24	5	20	0	0	12	48
Very High	0	0	1	4	1	4	5	20	1	4	8	32
Total	1	4	1	4	10	40	12	48	1	4	25	100

Note. Attitude: Attitude towards special needs students; Empathy: Empathy

.124 and a correlation coefficient of .229. A significance value of .124 ($p > .05$) showed that the hypothesis was not supported.

Discussion

Results of the current study showed a correlation coefficient of .299 with a p value of .124 ($p > .05$). This means that the hypothesis that there is a relationship between empathy and attitude on special needs students was not supported. Past studies' hypothesis stating that empathy has a relationship with attitude on special needs students were not in line with the present findings. Empathy, as explained by Baron and Bryne (2000), is an affective and cognitive response on other's emotional pressure. Attitude is an affect or a positive and negative evaluation of an object through three components which are cognitive, affective, and conative (Azwar, 2009). Even though empathy and attitude share an affective component, attitude is still formed through a cognitive component that acts as information for an object (Azwar, 2009). This cognitive component is also influenced by different learning processes (Baron & Byrne, 2000).

In addition to the cognitive component of attitude, the lack of relationship between these two variables may be due to the fact that individual empathy has subjective and situational qualities. According to Hoffman (as cited in Kurtines & Gerwitz, 1992), empathy sometimes occurs according to an individual's assumption and this may cause empathy to differ from displayed attitude, thus one can encounter the same object and have different emotional reaction depending on the situation and individual assumption. Therefore, one can have a very high level of empathy but have a negative attitude because the assumption and situation were different at the time.

The non-significant finding of the present study is also influenced by external factors affecting attitude towards students with special needs and empathy. In this case, an external factor can influence the emotion of an individual, but at the same time it can also not have any effect in the emotional factor (Walgito, as cited in Dayakisni & Hudaniah, 2006). The two variables share similar external factors including culture and experience. The first factor is culture, when empathy and attitude on special needs children are formed through the culture and norms of the environment. Culture is gained and learned from parents, the school environment, and even mass media. This culture will guide an individual's action when interacting with an object (Azwar, 2009). When the culture matches with the object, positive attitude will be displayed. In addition, this culture will create different assumptions on an object or event, and thus it will consequently influence the ability to display empathy (Hoffman, as cited in Kurtines & Gerwitz, 1992).

The next external factor is experience. Experience is obtained from the interaction between an individual and his/her social environment, and it is something that has a personal nature. Experience on an object, according to Azwar (2009), that leaves a strong impression will influence the creation of attitude. It can be explained that regular students who had good experiences with special needs students will influence his good behavior on special needs students. It can be seen that the school has provided early socialization opportunities regarding children with special needs, and this influenced the attitude of regular students. This is supported by Azar (as cited in Baron & Byrne, 2000) who stated that prior experience will affect the empathy of an individual especially experience that was obtained from parents, because when parents successfully display empathetic behavior, their children will follow. From the explanation it can be concluded

that every type of experience originating from outside the individual, parents or the environment, can affect his/her attitude and empathy.

The researchers found that a majority of subjects have levels of empathy that were categorized moderate to very high, with a percentage of 96% (24 students), and there was only one student (4%) who was categorized as having low empathy. This is supported from a survey result showing that a majority of students showed sympathy on special needs students, which was a total of 19 students (76%). Results from interviews with regular students showed that they are willing to lend their school equipments on special needs students if they forgot to bring their own. They will also explain study materials or other things that were asked to be done by those special needs students. The high level of empathy from regular students may be because their learning process in their environment, including the school environment. In this case, provision of compulsory courses in SMP Manguni such as religion, morality, and civics can increase student empathy because through those courses they are taught not only theories, but how to apply materials in daily life such as understanding and helping their regular and special needs friends.

In this research, results showed that the attitudes of subjects towards special needs students are mostly categorized in the moderate to very positive group, with a total percentage of 92% (23 students). Such positive attitude can be due to the interaction between regular students and special needs students. Based on the study by Vignes et al. (2008), positive attitude can be caused by direct contact between subjects and special needs students. This statement is in line with survey results showing that all students have had direct contact with special needs students. This helps individuals to understand and positively perceive those with special needs. This is consistent with survey results regarding evaluation of the subject on special needs students, with 56% stating that special needs students are "funny" and 20% stating that special needs students are pleasant friends. This supported by the reasoning that according to regular students, the behavior of special needs students is usually displayed for entertainment purposes, and that they love telling stories. Some also said that special needs students are very fun to play with.

Aside from direct contact, the positive attitude towards special needs students can be due to the provision of information. This is explained by

Vignes et al. (2008) who stated that students who have had prior information about special needs students from their parents, mass media, or teachers will have a more positive attitude. This is seen from the interview results done by the researchers on teachers and students. Most regular students have understood the different type of special needs children such as hyperactivity, autism, slow learner, and speech and hearing impaired, so that regular students can more readily accept special needs students in their school environment.

However, two students (8%) were shown to have a negative and very negative attitude towards students with special needs. Such negative attitude may occur because of a negative past experience with special needs students. This is seen by a particular explanation that special needs students are strange and frustrating due to their odd, disruptive behavior, and can sometimes be physically aggressive. In this case, the bad experience may leave a strong negative impression so that despite receiving prior information, the student will react negatively to children with special needs.

The researchers also found results that are not in direct opposition to the theoretical background. Theories stated that regular students will not show any interest interacting with special needs students such as the one done by Special Olympics (2007), mainly those with an intellectual disability. However, most special needs students in SMP Manguni were dominated by slow learners and survey results about the interaction between regular and special needs students showed that everyone have had an interaction with special needs students. Ten regular students (40%) even stated that they have frequent to very frequent interactions with them. Thus, this phenomenon is more consistent with the results by Colwell et al. (2001), who found that students favor those with intellectual disability to other types of disability because those with intellectual disability are more similar to regular students in terms of their physical appearance and ability to communicate.

Such attitude and empathy towards special needs students are inevitably linked with the adolescent development stages occurring on regular students. Developments in the cognitive, moral, and social dimensions enable individuals to think in abstract terms and to comprehend their environment; therefore regular students may react positively to special needs students and display a high level of empathetic response. The school and teachers strived to increase this positive attitude, as seen from inter-

view results detailing their efforts to socialize regular students with special needs students, arranging their seating positions to pair regular with special needs students, providing the same learning materials, and encouraging regular and special needs students to be involved in each and every in-class learning activities. The teacher's own positive and accepting attitude on special needs students also played a major influence on regular students, because attitude is one type of learning process that is obtained through observing other people's behavior (Hannon, 2006).

Limitations

The author did not conduct a try out/pilot study for the scales used, resulting in many omitted items especially for the empathy scale. During data collection, some special needs students were present in class and were seated next to the regular students. This could possibly make regular students try faking good because their answers might be seen by the special needs students. At that moment, the special needs students refused to move away from their seat. The author was not able to gather all regular students in one class due to the different questionnaire distribution schedules given by the headmaster. Survey completion was not done in the ideal time and condition. During data collection, 9th grade students were asked to join with 8th grade students. Consequently, many 9th grade students did not take the questionnaire seriously and were instead focusing on finishing it as soon as possible to get back into their class.

Conclusion

From the results of this study, regular students were considered to have positive attitude and show high level of empathy towards special needs students. This can be further improved with the involvement of teachers and the school such as with providing extracurricular activities such as weekend camping, outbound, and other activities. Such activities are encouraged because it is important for both regular and special needs students to interact and socialize within their school environment. Thus, regular students are expected to further improve their attitude and empathy by communicating or involving themselves in study activities. In addition, by not directly labeling special needs students as "ABK", regular students may display positive

attitude and behavior. As a result, every student will feel that their school environment becomes increasingly friendly and comfortable.

References

- Ali, M., & Asrori, M. (2008). *Psikologi remaja perkembangan peserta didik*. Jakarta: PT Bumi Aksara.
- Azwar, S. (2009). *Sikap manusia: Teori dan pengukurannya* (Edisi ke 2). Yogyakarta: Pustaka Pelajar.
- Baron, R. A., & Byrne, D. (2000). *Social psychology* (9th edition). USA: Allyn and Bacon.
- Batson, C. D., Polycarpou, M. P., Harmon-Jones, E., Imhoff, H. J., Mitchener, E. C., Bednar, L. L., ..., & Highberger, L. (1997). Empathy and attitudes: Can feeling for a member of a stigmatized group improve feelings toward the group? *Journal of Personality and Social Psychology*, 72, 105-118. Retrieved from <http://www.socialemotiveneuroscience.org/pubs/batsonetal97.pdf>
- Colwell, C. M., Thompson, L. K., & Berke, M. K. (2001). Disability simulation and information: Techniques for modifying the attitudes of elementary school music students. *Journal of Music Therapy*, 38, 321-341. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/11796081>
- Damardji, A. (2009). *Kebijakan pemerintah pelayanan pendidikan bagi Anak Berkebutuhan Khusus* Retrieved from <http://fis.uui.ac.id/index.php/?Kebijakan-Pemerintah-Pelayanan-Pendidikan-Bagi-Anak-Berkebutuhan-Khusus.html>
- Dayakisni, T., & Hudaniah. (2006). *Psikologi sosial*. Malang: UMM Press.
- Ermawati. (2008). Mengenal lebih jauh sekolah inklusi. *Pedagogik Jurnal Pendidikan*, 5, 25-35. Retrieved from <http://isjd.pdii.lipi.go.id/admin/jurnal/51082535.pdf>
- Feldman, R. S. (1998). *Social psychology* (2nd edition). New Jersey: Prentice Hall.
- Gunawan, H. (2011, 30 Mei). *Strategi dan program pemerintah kota Surabaya dalam mewujudkan pendidikan inklusi*. Makalah disampaikan dalam Diskusi Publik Pelaksanaan Pendidikan Inklusi di Kota Surabaya Universitas Surabaya. Paper presented (30 May) at a Seminar on Strategy and Surabaya City's Government Program in Implementing Inclusive Education at Universitas Surabaya.

- Hannon, F. (2006). Literature review on attitudes toward disability. Retrieved from <http://www.ucd.ie/issda/static/documentation/nda/nda-literature-review.pdf>
- Kurtines, W. M., & Gerwitz, J. L. (1992). *Moralitas, perilaku moral dan perkembangan moral* (M. I. Soelaiman, Pengalih bhs.) Jakarta: UI Press.
- Mangunsong, F. (2009). *Psikologi anak berkebutuhan khusus* (Vol. 1). Depok: LPSP3 UI
- Mauss, I. B., & Robinson, M. D. (2009). Measures of emotion: A review. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2756702/>
- Mussen, P. H., & Henry, P. (1994). *Perkembangan dan Kepribadian Anak*. (F. X. Budiyanto, Pengalih bhs.). Jakarta: Arcan.
- Nofrianto, S. (2008). *The golden teacher: 7 Poin menjadi guru yang memikat hati*. Depok: PT Lingkar Pena Kreativa.
- Pallant, J. (2011). *SPSS Survival manual: A step by step guide to data analysis using SPSS for windows* (4th ed.). Crows Nest, NSW 2065: Allen & Unwin
- Papalia, D. E., Olds, S. W., Feldman, R. D., (2009). *Human development* (10th ed., Book 2, B. Marwensdy, Pengalih bhs.). Jakarta: Salemba Humanika.
- Santrock, J. W. (2007). *Child development* (11th ed.). New York: McGraw Hill.
- Special Olympics. (2007). *Chinese youth attitudes toward student with intellectual disabilities*. Retrieved from <http://www.disabilitychina.org/admin/upLoadPic/200932615016396.pdf>
- Vignes, C., Godeau, E., Sentenac, M., Coley, N., Navarro, F., Grandjean, H., Arnaud, C. (2009). Determinants of Student's Attitude toward Peers with Disabilities. *Journal Compilation Development Medicine & Child Neurology*, 51, 473-479. Retrieved from http://research.ncl.ac.uk/sparcle/Publications_files/Published%20Article%20Determinants%20of%20Attitudes%20Arnaud.pdf
- Yusuf, S. (2000). *Psikologi perkembangan anak dan remaja*. Bandung: PT Remaja Rosdakarya.